

In the claims

1. (Withdrawn and currently amended) A method of protecting an animal from disease, said method comprising:

- a. producing a disease-related protein or peptide from ~~the~~ an agent that causes the disease in a transformed host cell; and
- b. delivering the protein or peptide to an animal suspected of being infected by the agent, wherein delivery of the protein inhibits or retards binding of the agent that causes the disease in one or more cells of the animal.

2. (Withdrawn) The method of claim 1, wherein the agent that causes the disease is a virus.

3. (Withdrawn) The method in claim 1, wherein the agent that causes the disease is a bacterium.

4. (Withdrawn) The method in claim 1, wherein the agent that causes the disease is a prion.

5. (Withdrawn) The method of claim 1, wherein said producing comprises transforming a host cell with a nucleic acid encoding the disease-related protein to form a transformed cell.

6. (Withdrawn) The method of claim 1, wherein the host cell is chosen from bacteria, algae, yeast, fungi, insects, animals, plants, and tissue cultures of any of the above.

7. (Withdrawn) The method of claim 6, wherein the host cell is an alga.

8. (Withdrawn) The method of claim 6, wherein the host cell is a yeast.

9. (Withdrawn) The method of claim 6, wherein the host cell is a bacterium.

10. (Withdrawn) The method of claim 1, wherein the disease-related protein is a fusion protein.

11. (Withdrawn) The method of claim 1, wherein the disease-related protein is a viral protein.

12. (Withdrawn) The method of claim 11, wherein the viral protein comprises one or more segments of white spot syndrome virus.
13. (Withdrawn) The method of claim 12, wherein the viral protein comprises one or more segments of white spot syndrome viral protein VP26.
14. (Withdrawn) The method of claim 12, wherein the viral protein comprises one or more segments of white spot syndrome viral protein VP28.
15. (Withdrawn) The method of claim 12, wherein the viral protein comprises one or more segments of white spot syndrome viral protein VP19.
16. (Withdrawn) The method of claim 12, wherein the viral protein comprises one or more segments of white spot syndrome viral protein VP24.
17. (Original) A feed comprising a recombinant protein or peptide capable of binding to a disease-causing agent.
18. (Original) The feed of claim 17, wherein the recombinant protein or peptide comprises at least a portion of a viral protein.
19. (Original) The feed of claim 18, wherein the recombinant protein or peptide comprises white spot syndrome virus sequences.
20. (Original) The feed of claim 19, wherein the recombinant protein or peptide comprises sequences chosen from one or more of VP24, VP28, VP26, and VP19.
21. (Original) A feed additive comprising a recombinant protein or peptide capable of binding to a disease-causing agent.

22. (Original) The feed additive of claim 21, which is fed to an animal as whole cells or broken cells.

23. (Original) The feed additive of claim 21, which is fed to an animal as purified or semi-purified protein, or encapsulated versions of these.

24. (Original) The feed additive of claim 21, comprising a recombinant protein or peptide comprising at least a portion of a viral protein.

25. (Original) The feed additive of claim 24, wherein the recombinant protein or peptide comprises white spot syndrome virus sequences.

26. (Original) The feed additive of claim 25, wherein the recombinant protein or peptide comprises sequences from one or more of VP24, VP28, VP26, and VP19.

27. (Withdrawn) A method of protecting an animal from disease, said method comprising:

a. producing a protein or peptide capable of binding a disease-causing agent in a transformed host cell; and

b. delivering the protein or peptide to an animal suspected of being infected by the agent, wherein delivery of the protein inhibits or retards binding of the agent that causes the disease in one or more cells of the animal.

28. (Original) A feed comprising a recombinant protein or peptide capable of binding a disease-causing agent and reducing or alleviating a disease state.

29. (Original) A feed additive comprising a protein or peptide capable of binding to a disease-causing agent.

30. (Original) The feed additive of claim 29, which is fed as whole cells or broken cells.

31. (Original) The feed additive of claim 30, which is fed as purified or semi-purified protein, or encapsulated versions of these.